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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,210	07/07/2003	Masahiko Mizutani	520.42914X00	4588

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EXAMINER	
RUSSELL, WANDA Z	
ART UNIT	**PAPER NUMBER**
2616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/613,210	MIZUTANI ET AL.	
	Examiner	Art Unit	
	Wanda Z. Russell	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892) ✓
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) ✓ Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the "NSA" is mentioned three times before it is spelled out in [0071].

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 4-13, and 15** are rejected under 35 U.S.C. 102(e) as being anticipated by Yonekura (Pub No. US 2002/0087730 A1).

Regarding **claim 1**, Yonekura discloses a content relay (Title) node (Fig. 2) having a function of routing (Fig. 2) data packets ([0035], line 3) in an application layer (web content, Title), comprising:

a receiving unit (10, 10a-Fig. 1, and 10a-Fig. 2) having a plurality of input ports (20a, 20a, 20a-Fig. 1, and Fig. 2);

a transmitting unit (10, 10a-Fig. 1, and 10a-Fig. 2) having a plurality of output ports (20a, 20a, 20a-Fig. 1, and Fig. 2);

a data processing unit (10a-Fig. 2, and [0045], last line and line 4-end);

a switch unit (relay transferring, [0015], line 3, and 10, 10a-Fig. 1 and 10a-Fig. 2) for connecting said receiving unit, said transmitting unit, and said data processing unit;

a plurality of storages (10a, 20a-Fig. 1, and [0048], lines 7-10) having a data storing function; and

a routing control unit (10, 10a-Fig. 1, and 10a-Fig. 2) for controlling ([0039], last 6 lines, and [0048], line 10) said receiving unit, said transmitting unit, said switch unit, and said storages,

wherein each of said data packets includes a storage address (IP address, [0035], line 7) for identifying (select, [0039], 4th line from the end) said plurality of storages on a network and a data attribute ([0047], lines 8-11. "to specify a mobile common carrier, to which it belongs, the model of the portable telephone set, and the like" are the data attribute),

said receiving unit has means for receiving (s1-Fig. 2) a data packet, means for extracting (s2-Fig. 2, and [0044], lines 3-6) the storage address and the data attribute from the data packet, means for transferring (s4-Fig. 2, and manages, [0040], 5th line from the end) the data attribute to said routing control unit, and means for sending (s4-Fig. 2, and manages, [0040], 5th line from the end) the data packet to said switch unit (Fig. 2),

said routing control unit has means for selecting (select, [0039], 4th line from the end), as a destination of a received data packet, one of said transmitting unit and said data processing unit on the basis of routing information including the storage address

and instructing said switch unit to make switching (s2-s10-Fig. 2, and [0039], last 6 lines),

said storage has means for storing ([0048], lines 7-10) the received data,

said switch unit has means for switching (request, [0035], line 9 and Fig. 2) a route on the basis of the control signal,

said data processing unit has means for storing ([0048], lines 7-10) or transmitting (s2-s10-Fig. 2, and [0039], last 6 lines) data on the basis of the data attribute, and

said transmitting unit has means for processing ([0045], lines 5-10) the header of a data packet in accordance with a control signal from said control unit and means for transferring (s9-Fig. 2) the data packet to a neighboring relay node (10b-Fig. 2).

Regarding **claim 4**, Yonekura discloses the content relay node according to claim 1, wherein the storage has a memory or a memory space constructed by one HDD or a plurality of media (10a-Fig. 2).

Regarding **claim 5**, Yonekura discloses the content relay node according to claim 1, wherein said switch unit (10a-Fig. 2) has means for sending an input data packet to the data processing unit in order to store received data into the storage (Fig. 2, and [0048], lines 7-end), and

said storage has means for receiving (s1-Fig. 2) data from said data processing unit (10a-Fig. 2) and storing ([0048], line 7-10) the received data in the node at least until transfer of the data to the next relay node is completed (Fig. 2) .

Regarding **claim 6**, Yonekura discloses the content relay node according to claim 5, further comprising at least one of means for storing ([0048], line 7-10) received data in the form of a packet and means for rebuilding (insert, [0048], line 8) data from a plurality of packets and storing ([0048], line 10) the rebuilt data in the node, in said data storing process.

Regarding **claim 7**, Yonekura discloses the content relay node according to claim 1, further comprising means for reading (s5-Fig. 2) out data stored in the node and re-transmitting the data in the case where the receiving unit detects a data transmission request ([0035], line 9).

Regarding **claim 8**, Yonekura discloses the content relay node according to claim 1, further comprising means for determining (allocates, [0035], line 8) a route and constructing (execute, [0044], 2nd line from the end) an SRT (URL, [0044], last line) on the basis of data size ([0045], line 7 – end) of a received data flow and available memory space (server, [0045], line 7) in the next storage for relay at the time of determining correspondence, to be registered in the SRT, between a destination NSA and the next NSA for relay.

Regarding **claim 9**, Yonekura discloses the content relay node according to claim 1, further comprising means for notifying the other nodes constructing a content routing network of available memory spaces to each other (see whole [0045]).

Regarding **claim 10**, Yonekura discloses the content relay node according to claim 1, wherein said receiving unit has means for determining (allocates, [0035], line 8)

whether data supplied to an input port is to be routed on the basis of a storage address (IP address, [0035], line 7) or not (see whole [0039]).

Regarding **claim 11**, Yonekura discloses the content relay node according to claim 1, further comprising means for using route information obtained by function of a transfer protocol of a lower layer (IP, [0035], line 7 and 1-end) at the time of determining a transfer route.

Regarding **claim 12**, Yonekura discloses the content relay node according to claim 1, further comprising means for dividing ([0037], lines 1-3) data into a plurality of packets in an application layer as necessary and transmitting the packets.

Regarding **claim 13**, Yonekura discloses the content relay node according to claim 1, wherein said data packet is comprised of a header ([0047], line 9) portion including a data attribute of the application layer and data portion including the contents of data ([0047], lines 8-11).

Regarding **claim 15**, Yonekura discloses the content relay node according to claim 1, wherein said data packets include, as a data attribute included in the header, data identifiers indicating that the data packets are generated from the same data, and packet identifiers indicative of the order (reduced, [0040], last 3 lines) of the data packets as re-building (decompress, [0062], line 2) information in the case where the data is divided (reduced, [0040], lines 1-3) and the resultant is transmitted ([0037], lines 1-3).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 2, 3, 14, and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonekura (Pub No. US 2002/0087730 A1).

Regarding **claim 2**, Yonekura discloses the content relay node according to claim 1, further comprising:

means for holding (store, [0048], line 10), in the control unit, a storage routing table ([0047], line 12, "a table correlating the model of the portable telephone set with the type of the display at the content relay service device 10a side, the display type of the portable telephone set 20a which has made access can be determined" play the function of routing table) (SRT) expressed by using identification information (URL, [0045], line 6) (network storage address: NSA) for identifying a storage ([0048], line 11-end) on a network; and

means for determining (allocates, [0035], line 8) a destination (storage place, [0048], last line) NSA corresponding to the destination NSA by using the SRT.

Regarding **claim 3**, Yonekura discloses the content relay node according to claim 2, wherein said NSA is expressed by one piece of or a combination of a plurality of pieces of information (s3, s7-Fig. 2) indicative of position of a relay node on a network, identification information of a storage distinctive physically or logically, and

information for specifying a data storage location (URL, [0045], line 6) by designating a directory or a block address in a storage area ([0048], lines 10-11).

Regarding **claim 14**, Yonekura discloses the content relay node according to claim 1, wherein said data packet includes in a header portion thereof a destination NSA and a source NSA of the data packet ([0047], lines 8-11, to a person skilled in the art, destination and source – the like, in [0047], line 11 – are included in the header portion of the data packet).

Regarding **claim 16**, Yonekura discloses the content relay node according to claim 1, wherein said data packet includes priority information (to a person skilled in the art, priority information – the like, [0047], line 11 – is included in the data packet).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wanda Z. Russell whose telephone number is (571) 270-1796. The examiner can normally be reached on Monday-Thursday 9:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (571) 271-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WZR

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